Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	Jul 12	BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS
NEWS 4	AUG 02	IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields
NEWS 5	AUG 02	CAplus and CA patent records enhanced with European and Japan Patent Office Classifications
NEWS 6	AUG 02	The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available
NEWS 7	AUG 27	BIOCOMMERCE: Changes and enhancements to content coverage
NEWS 8	AUG 27	BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC
NEWS 9	SEP 01	INPADOC: New family current-awareness alert (SDI) available
NEWS 10	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS 11	SEP 01	New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
NEWS 12	SEP 14	STN Patent Forum to be held October 13, 2004, in Iselin, NJ
NEWS 13	SEP 27	STANDARDS will no longer be available on STN
NEWS 14	SEP 27	SWETSCAN will no longer be available on STN
NEWS 15	SEP 30	STN downtime scheduled October 2-3, 2004

NEWS EXPRESS	JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 12:21:11 ON 05 OCT 2004

=> file reg
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 0.21 0.21

FILE 'REGISTRY' ENTERED AT 12:21:23 ON 05 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2004 HIGHEST RN 756793-93-8
DICTIONARY FILE UPDATES: 4 OCT 2004 HIGHEST RN 756793-93-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.63

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:21:30 ON 05 OCT 2004

Connecting via Winsock to STN

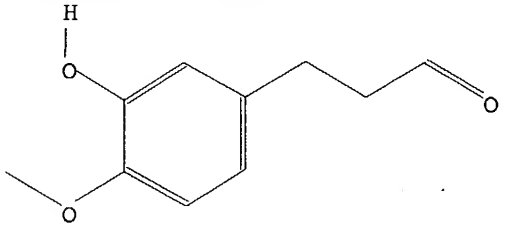
Welcome to STN International! Enter x:x

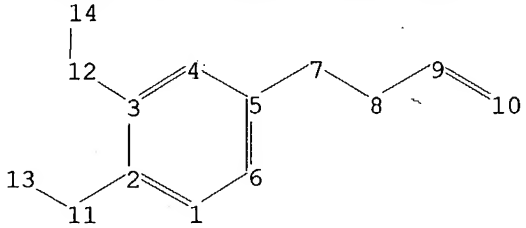
LOGINID:SSSPTA1623PAZ

PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 12:24:20 ON 05 OCT 2004
FILE 'REGISTRY' ENTERED AT 12:24:20 ON 05 OCT 2004
COPYRIGHT (C) 2004 American Chemical Society (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.63

=>
Uploading C:\Examination Auxillary files\10796093\10796093 clmd cmpd.str



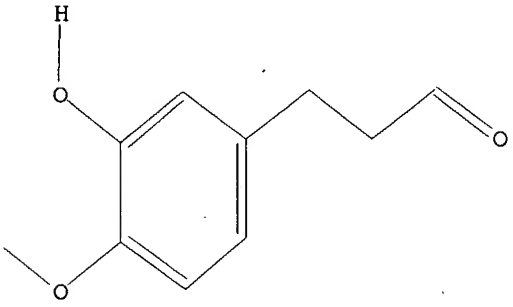


chain nodes :
7 8 9 10 11 12 13 14
ring nodes :
1 2 3 4 5 6
chain bonds :
2-11 3-12 5-7 7-8 8-9 9-10 11-13 12-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
2-11 3-12 9-10 11-13
exact bonds :
5-7 7-8 8-9 12-14
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

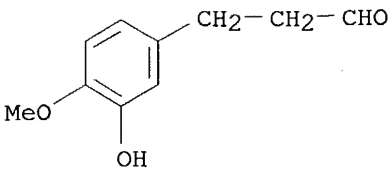
=> search l1 exact full
FULL SEARCH INITIATED 12:25:34 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 146 TO ITERATE

100.0% PROCESSED 146 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L2 1 SEA EXA FUL L1

=> d scan

L2 1 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 3-hydroxy-4-methoxy- (9CI)
MF C10 H12 O3

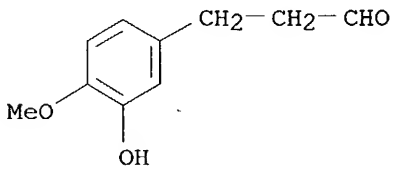


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> d l2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 333754-84-0 REGISTRY
CN Benzenepropanal, 3-hydroxy-4-methoxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-(3-Hydroxy-4-methoxyphenyl)propionaldehyde
FS 3D CONCORD
MF C10 H12 O3
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	55.70	55.91

FILE 'CAPLUS' ENTERED AT 12:26:39 ON 05 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 5 Oct 2004 VOL 141 ISS 15
FILE LAST UPDATED: 4 Oct 2004 (20041004/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

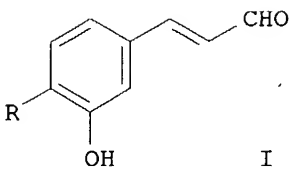
=> l2
L3 3 L2

=> d l3 1-3 ti fbib abs

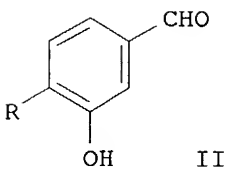
L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for producing cinnamyl aldehyde derivatives and use thereof as intermediate for aspartame derivative
AN 2001:851092 CAPLUS
DN 135:371997
TI Process for producing cinnamyl aldehyde derivatives and use thereof as intermediate for aspartame derivative
IN Mori, Kenichi; Fujita, Shinji; Funakoshi, Nao; Takemoto, Tadashi
PA Ajinomoto Co., Inc., Japan
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001087813	A1	20011122	WO 2001-JP3545	20010424
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				JP 2000-142811	A 20000516
	EP 1283197	A1	20030212	EP 2001-922073	20010424
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				JP 2000-142811	A 20000516
				WO 2001-JP3545	W 20010424
	US 2003163004	A1	20030828	US 2002-295997	20021118
				JP 2000-142811	A 20000516
				WO 2001-JP3545	A1 20010424

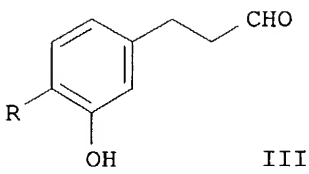
OS CASREACT 135:371997; MARPAT 135:371997
GI



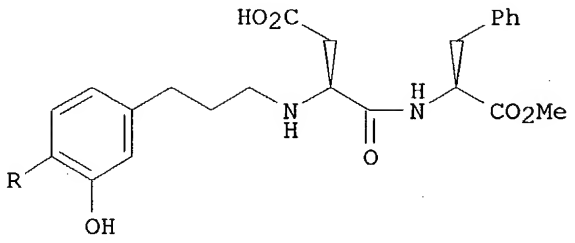
I



II



III



IV

AB Described is an industrial process for conveniently and efficiently producing highly pure cinnamyl aldehyde derivs. (I; R = H, C1-4 alkyl or alkoxy) such as (2E)-(3-hydroxy-4-methoxy)cinnamyl aldehyde which comprises reacting a benzaldehyde derivative (II; R = same as above) (for example, isovanillin) with acetaldehyde in the presence of an alkali, preferably adding acetaldehyde in portions in an aqueous solution at a low temperature

The cinnamyl aldehyde derivs. (I) thus obtained are selectively reduced into 3-(3-hydroxy-4-substituted phenyl)propionaldehydes (III; R = same as above). These compds. III are further subjected to reductive alkylation with aspartame to efficiently give N-[N-[3-(3-hydroxy-4-substituted phenyl)propyl]-L-α-aspartyl]-L-phenylalanine 1-Me esters (IV; R = H, C1-4 alkyl or alkoxy), which are useful as sweeteners with high sweetness. Thus, 121.72 g isovanillin and 320 g NaOH were dissolved in 2,000 mL H2O and cooled to -10°, followed by continuously adding 290 g 28 weight% aqueous acetaldehyde over a period of 45 h, and the resulting mixture was stirred for 1 h, treated with 768.1 g 36 weight% aqueous HCl, and filtered to give 324 g crystalline product. The latter product was dispersed in 500 mL H2O at 25°, treated with 97.5 g 25 weight% aqueous NaOH for dissoln., stirred with 4 g activated charcoal and 16 g celite, and filtered. The filtrate was neutralized with 55.4 g 36 weight% aqueous HCl to give 185.5 g crystalline product

which was vacuum-dried, dispersed in 275 mL MeOH at 60°, stirred for 2 h, cooled to room temperature, and filtered to give, after drying the wet crystals, 83.2 g (2E)-3-hydroxy-4-methoxycinnamaldehyde (98% purity) in 57% yield. The latter compound (5.00 g) and 300 mg 5% Pd-Al2O3 were added to 80 mL MeOH and stirred under H atmospheric at 35° for 24 h, followed by filtration for removal of the catalyst and washing the catalyst with 10 mL MeOH, to give a MeOH solution of 3-(3-hydroxy-4-methoxyphenyl)propionaldehyde (87% yield). The latter solution (8.15 g) containing 1.50 g of the aldehyde and

2.57 g aspartame were added to a 4:1 mixture of MeOH and H2O, followed by adding 0.7 g 10% Pd-C containing 50% H2O, and the resulting mixture was stirred at 35° under H atmospheric for 48 h to give 71% N-[N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L-α-aspartyl]-L-phenylalanine 1-Me ester.

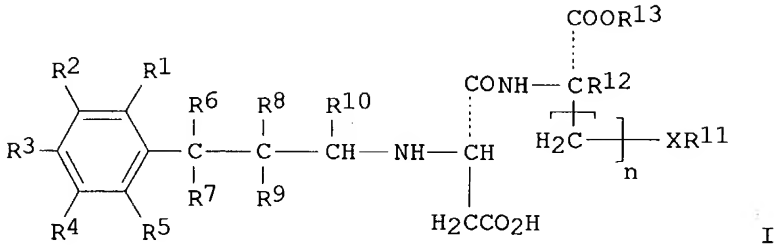
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
TI N-Alkylaspartyl dipeptide esters and low-calorie sweeteners containing them
AN 2001:842307 CAPLUS
DN 135:370940

TI N-Alkylaspartyl dipeptide esters and low-calorie sweeteners containing them
IN Amino, Yusuke; Yuzawa, Kazuko
PA Ajinomoto Co., Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001322996	A2	20011120	JP 2000-142808	20000516
			JP 2000-142808	20000516

OS MARPAT 135:370940
GI



I

AB Sweeteners contain title compds. I (R1-R5 = H, OH, C1-3 alkoxy, C1-3 alkyl, C2-3 hydroxyalkyloxy; R6-R10 = H, C1-3 alkyl; R11 = C1-5 alkyl; R12 = H, C1-3 alkyl; R13 = C1-4 alkyl; X = O, S; n = 1, 2) or their salts. A THF solution of 967 mg α-L-aspartyl-(S-tert-butyl)-L-cysteine Me ester was condensed with 360 mg 3-(3-hydroxy-4-methoxyphenyl)propionaldehyde in the presence of AcOH and NaB(OAc)3H at room temperature overnight to give 596 mg
I (R1 = R4-R10 = R12 = H, R2 = OH, R3 = OMe, R11 = CMe3, R13 = Me, X = S, n = 1), which was 40,000 times as sweet as sucrose.

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for the production of aspartyldipeptide ester derivatives, novel intermediates therefor and process for the production of the intermediates
AN 2001:265443 CAPLUS
DN 134:281142
TI Process for the production of aspartyldipeptide ester derivatives, novel intermediates therefor and process for the production of the intermediates
IN Nagashima, Kazutaka; Aoki, Yuuichi; Takemoto, Tadashi; Amino, Yusuke; Funakoshi, Nao; Ono, Eriko
PA Ajinomoto Co., Inc., Japan
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001025260	A1	20010412	WO 2000-JP6626	20000926

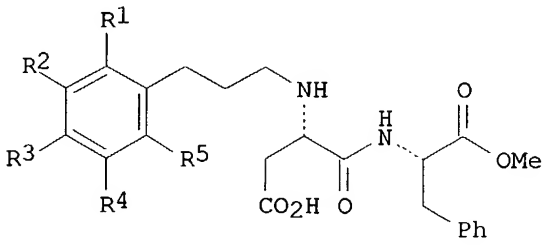
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

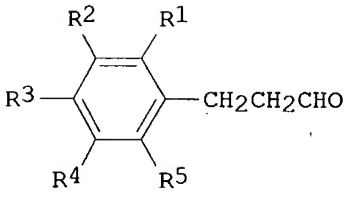
			JP 1999-287398	A 19991007
			JP 1999-371284	A 19991227
AU 2000073219	A5	20010510	AU 2000-73219	20000926
			JP 1999-287398	A 19991007
			JP 1999-371284	A 19991227
			WO 2000-JP6626	W 20000926
EP 1231215	A1	20020814	EP 2000-961237	20000926
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
			JP 1999-287398	A 19991007
			JP 1999-371284	A 19991227
			WO 2000-JP6626	W 20000926
US 2002133037	A1	20020919	US 2002-117196	20020408
US 6794531	B2	20040921		
			JP 1999-287398	A 19991007
			JP 1999-371284	A 19991227
			WO 2000-JP6626	A1 20000926
US 2004176472	A1	20040909	US 2004-796093	20040310
			JP 1999-287398	A 19991007
			JP 1999-371284	A 19991227
			WO 2000-JP6626	A1 20000926
			US 2002-177196	A1 20020621

OS CASREACT 134:281142; MARPAT 134:281142

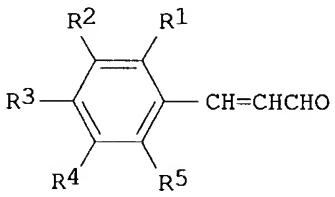
GI



I



II



III

AB Industrial and efficient processes for producing aspartyldipeptide ester derivs. of general formula (I; R1-R5 = H, OH, C1-3 alkoxy, C1-3 alkyl, benzyloxy, C2-3 hydroxyalkyloxy; or R1 and R2 or R2 and R3 together represents methylenedioxy), which are expected to serve as sweetener (no data), comprise reductive alkylation of aspartame with propionaldehydes or cinnamaldehydes of general formulas (II) and (III) in the presence of a catalyst. Particularly, described are an industrial and efficient process for producing N-[N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L-aspartyl]-L-phenylalanine 1-Me ester (IV) which is excellent as high sweetener; useful and advantageous intermediates for the process; and efficient processes for producing the intermediates. Thus, 5.89 g aspartame and 3.42 g

3-(3-hydroxy-4-methoxyphenyl)propionaldehyde (preparation given) were added to 200 mL 80% aqueous methanol, stirred at 40° for a while, and hydrogenated in the presence of 1.78 10% Pd-C at 0.1 M Pa and 40° for 40 h to give 78.9% IV.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	14.69	70.60

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.10	-2.10

FILE 'REGISTRY' ENTERED AT 12:36:14 ON 05 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2004 HIGHEST RN 756793-93-8
DICTIONARY FILE UPDATES: 4 OCT 2004 HIGHEST RN 756793-93-8

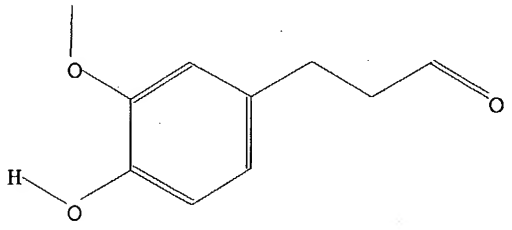
TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

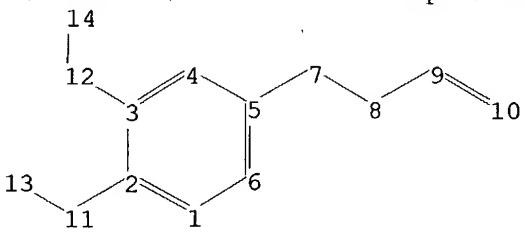
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Examination Auxillary files\10796093\10796093 clmd cmpd isomer.str





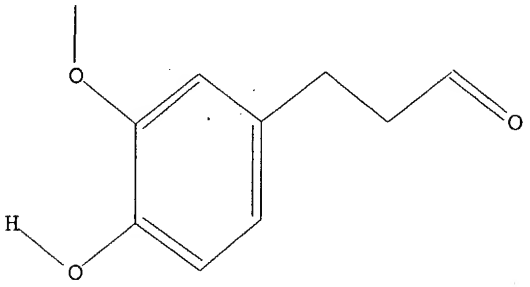
chain nodes :
7 8 9 10 11 12 13 14
ring nodes :
1 2 3 4 5 6
chain bonds :
2-11 3-12 5-7 7-8 8-9 9-10 11-13 12-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
2-11 3-12 9-10 12-14
exact bonds :

5-7 7-8 8-9 11-13
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
 11:CLASS 12:CLASS 13:CLASS 14:CLASS

L4 STRUCTURE UPLOADED

=> d l4
L4 HAS NO ANSWERS
L4 STR



Structure attributes must be viewed using STN Express query preparation.

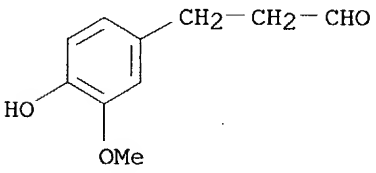
=> search l4 exact full
FULL SEARCH INITIATED 12:36:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 132 TO ITERATE

100.0% PROCESSED 132 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L5 1 SEA EXA FUL L4

=> d scan

L5 1 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 4-hydroxy-3-methoxy- (9CI)
MF C10 H12 O3

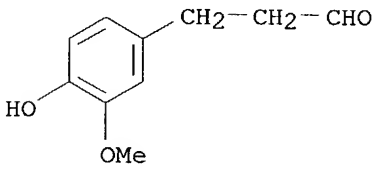


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> d l5

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 80638-48-8 REGISTRY
CN Benzenepropanal, 4-hydroxy-3-methoxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-(4'-Hydroxy-3'-methoxyphenyl)-1-propanal
CN 4-Propanal-2-methoxyphenol
FS 3D CONCORD
MF C10 H12 O3
LC STN Files: CA, CAPLUS, CASREACT, CHEMLIST, TOXCENTER, USPATFULL
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); RACT (Reactant or reagent)
RL.NP Roles from non-patents: BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

15 REFERENCES IN FILE CA (1907 TO DATE)
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	54.86	125.46

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-2.10

FILE 'CAPLUS' ENTERED AT 12:37:10 ON 05 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 5 Oct 2004 VOL 141 ISS 15
FILE LAST UPDATED: 4 Oct 2004 (20041004/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> 15
L6          15 L5

=> 15/prep
            15 L5
       3205030 PREP/RL
L7           2 L5/PREP
                 (L5 (L) PREP/RL)

=> d l7 m1-2 ti fbib abs
'M1-2' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
```

KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):end

=> d l7 1-2 ti fbib abs

L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
TI Chemical composition of alkaline pulping products of lignin model compounds
AN 1996:571131 CAPLUS
DN 125:224831
TI Chemical composition of alkaline pulping products of lignin model compounds
AU Karpunin, I. I.; Muzychenko, M. P.
CS Beloruss. Gos. Tech. Univ., Belarus
SO Vestsi Akademii Navuk Belarusi, Seryya Khimichnykh Navuk (1996), (1), 15-23
CODEN: VAKNEK; ISSN: 0002-3590
PB Navuka i Tekhnika
DT Journal
LA Russian
AB Alkaline pulping of lignin model compds. (guaiacylglycerol β-coniferyl ether, dehydrodiconiferyl alc., and pinoresinol) was carried out and several mono-, di-, tri-, tetra-, and pentameric products were separated and identified using paper chromatog., NMR and mass spectrometry.

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
TI Thermolytic decomposition of coniferyl alcohol
AN 1992:553001 CAPLUS
DN 117:153001
TI Thermolytic decomposition of coniferyl alcohol
AU Masuku, Christopher P.
CS Dep. Chem. Eng., Helsinki Univ. Technol., Espoo, SF-02150, Finland
SO Journal of Analytical and Applied Pyrolysis (1992), 23(2), 195-208
CODEN: JAAPDD; ISSN: 0165-2370
DT Journal
LA English
AB Thermal decomposition of coniferyl alc. was studied at 200-275° under an inert atmospheric to shed more light on the initial thermal reactions in the thermochem. conversion of lignin. In this temperature range, dimerization and oligomerization reactions dominated, whereas side chain C-C bond scission, dehydration, rearrangement, and H transfer reactions were partly obscured. The thermolytic reactions of the allylic side chain occurred more easily than those of the aryl-alkyl ether linkage. The primary aliphatic OH group was a site of transferable H. The major monoarom. products formed were dihydroconiferyl alc., coniferaldehyde, cis- and trans-isoeugenol, eugenol, and dihydroconiferaldehyde.

=> d l6 1-15 ti

L6 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN

TI Fresh organically grown ginger (Zingiber officinale): composition and effects on LPS-induced PGE2 production

L6 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis of N,N',N''-trisubstituted thiourea derivatives and their antagonist effect on the vanilloid receptor

L6 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Carbon isotope ratio analysis of organic moieties from fossil mummified wood: establishing optimum conditions for off-line pyrolysis extraction using gas chromatography/mass spectrometry

L6 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI The Relative Toxicity of Substituted Phenols Reported in Cigarette Mainstream Smoke

L6 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Effect of pyrofoil composition on pyrolysis of lignin

L6 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for producing and purifying aspartame derivative as sweetener

L6 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Retention of lignin in seagrasses: angiosperms that returned to the sea

L6 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Chemical composition of alkaline pulping products of lignin model compounds

L6 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Thermolytic decomposition of coniferyl alcohol

L6 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Ultrafiltration and pyrolysis gas chromatography mass spectrometry of chlorolignins in pulp mill effluent

L6 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Evaluation of a tobacco fractionation procedure using pyrolysis mass spectrometry combined with multivariate analysis

L6 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Characterization of tobacco lignin preparations by Curie-point pyrolysis-mass spectrometry and Curie-point pyrolysis-high-resolution gas chromatography/mass spectrometry

L6 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Determination of phenols in coffee

L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Topical cosmetics containing 1,7-diphenyl-4-hepten-3-one for skin disorder treatment

L6 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparative recovery and analysis of the phenolic fractions from curing smoke. III. Separation and identification of mono- and dihydroxy compounds

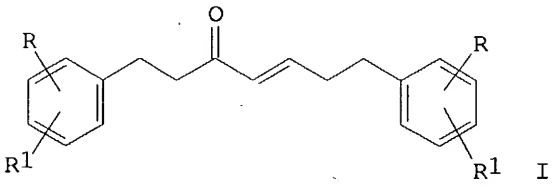
=> d 16 14,15 ti fbib abs

L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Topical cosmetics containing 1,7-diphenyl-4-hepten-3-one for skin disorder treatment

AN 1987:561391 CAPLUS
DN 107:161391
TI Topical cosmetics containing 1,7-diphenyl-4-hepten-3-one for skin disorder treatment
IN Miyahara, Reiji; Komazaki, Hisayuki; Magara, Tsunao; Sato, Etsuhisa; Hirao, Tetsuji
PA Shiseido Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 62099325	A2	19870508	JP 1985-239069	19851025
			JP 1985-239069	19851025

GI



I

AB Topical cosmetics contain at least one compound selected from 1,7-diphenyl-4-hepten-3-one (I; R and R1 = H, OH, or OMe). A skin lotion consisted of 1,7-diphenyl-4-hepten-3-one 0.15, glycerin 4.0, 1,3-butylene glycol 4.0, EtOH 7.0, polyoxyethylene oleyl alc. 0.5, methylparaben 0.05, citric acid 0.01, Na citrate 0.1, a perfume 0.05, and H2O to 100% by weight

L6 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparative recovery and analysis of the phenolic fractions from curing smoke. III. Separation and identification of mono- and dihydroxy compounds
AN 1982:67395 CAPLUS
DN 96:67395
TI Preparative recovery and analysis of the phenolic fractions from curing smoke. III. Separation and identification of mono- and dihydroxy compounds
AU Wittkowski, Reiner; Toth, Lazlo; Baltes, Werner
CS Inst. Lebensmittelchem., Tech. Univ. Berlin, Berlin, D-1000, Fed. Rep. Ger.
SO Zeitschrift fuer Lebensmittel-Untersuchung und -Forschung (1981), 173(6), 445-57
CODEN: ZLUFAR; ISSN: 0044-3026
DT Journal
LA German
AB To determine as completely as possible the composition of a phenolic extract obtained
by a mild procedure a monohydroxy- and dihydroxy-fraction were separated by treatment with a Na2BO3 solution By gas chromatog.-mass spectrometry-anal. of their trimethylsilyl-derivs. numerous new phenols were identified. The phenol extract of smoke contained about 20% of dihydroxybenzenes, the main constituents of which were represented by pyrocatechol and its 4- and 5-methyl-, 3- and 4-ethyl-, and 3-methoxy-derivs. The presence of 5 further dihydroxybenzenes was shown. By the technique described 119

phenols could be demonstrated, 62 of which were structurally identified.

=> d 16 6 ti fbib abs

L6 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for producing and purifying aspartame derivative as sweetener
AN 2001:185780 CAPLUS
DN 134:223039
TI Process for producing and purifying aspartame derivative as sweetener
IN Amino, Yusuke; Yuzawa, Kazuko; Takemoto, Tadashi
PA Ajinomoto Co., Inc., Japan
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	WO 2001018034	A1	20010315	WO 2000-JP5665		20000823
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
				JP 1999-253498	A	19990907
	AU 2000067273	A5	20010410	AU 2000-67273		20000823
				JP 1999-253498	A	19990907
				WO 2000-JP5665	W	20000823
	US 2002147361	A1	20021010	US 2002-91500		20020307
				JP 1999-253498	A	19990907
				WO 2000-JP5665	A1	20000823
	US 2004049066	A1	20040311	US 2003-656228		20030908
				JP 1999-253498	A	19990907
				WO 2000-JP5665	A1	20000823
				US 2002-91500	A1	20020307

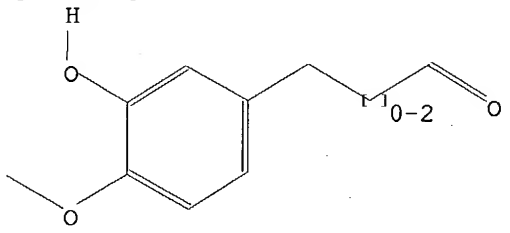
OS CASREACT 134:223039
AB This document discloses the following : a method for industrially producing N-[N-[3-(3-methoxy-4-hydroxyphenyl)propyl]-L-α-aspartyl]-L-phenylalanine 1-Me ester which is useful as a sweetener, in particular, a process for producing the target compound in a high yield by the reductive alkylation reaction of aspartame with 3-(3-methoxy-4-hydroxyphenyl)propionaldehyde or its derivative; a method of effectively purifying the target compound contaminated with impurities invading thereinto at various production stages (involving methods other than the above-described reductive alkylation), more particularly, a method of separating the target compound in the form of highly pure crystals; the crystals;
sweeteners containing the same; and utilization thereof in various products which are to be sweetened.
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

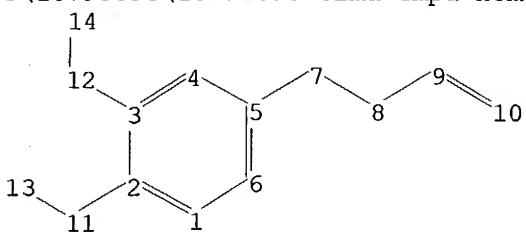
=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	31.10	156.56

```
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)        SINCE FILE      TOTAL
                                                     ENTRY    SESSION
CA SUBSCRIBER PRICE                                  -3.50      -5.60

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:53:12 ON 05 OCT 2004

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 13:18:52 ON 05 OCT 2004
FILE 'CAPLUS' ENTERED AT 13:18:52 ON 05 OCT 2004
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                  31.10     156.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)        SINCE FILE      TOTAL
                                                     ENTRY    SESSION
CA SUBSCRIBER PRICE                                  -3.50      -5.60

=> file reg
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                  31.54     157.00

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)        SINCE FILE      TOTAL
                                                     ENTRY    SESSION
CA SUBSCRIBER PRICE                                  -3.50      -5.60

FILE 'REGISTRY' ENTERED AT 13:19:24 ON 05 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    4 OCT 2004  HIGHEST RN 756793-93-8
DICTIONARY FILE UPDATES:   4 OCT 2004  HIGHEST RN 756793-93-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
```

Uploading C:\Examination Auxillary files\10796093\10796093 clmd cmpd homologs.str



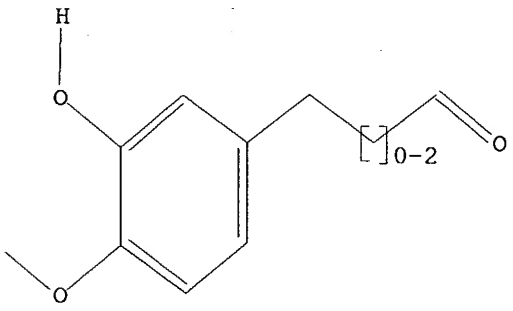


chain nodes :
7 8 9 10 11 12 13 14
ring nodes :
1 2 3 4 5 6
chain bonds :
2-11 3-12 5-7 7-8 8-9 9-10 11-13 12-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
2-11 3-12 9-10 11-13
exact bonds :
5-7 7-8 8-9 12-14
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS

L8 STRUCTURE UPLOADED

=> d l8
L8 HAS NO ANSWERS
L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l8 sss exact full
'SSS' IS NOT VALID HERE
For additional help, enter "HELP SEARCH".

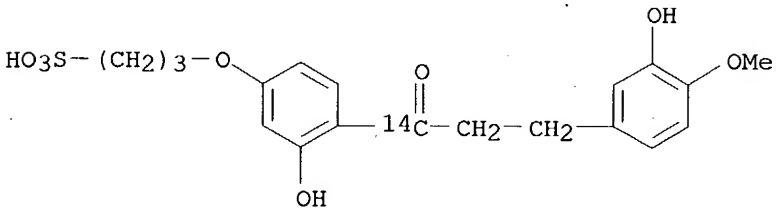
=> search l8 sss full
FULL SEARCH INITIATED 13:20:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 122173 TO ITERATE

100.0% PROCESSED 122173 ITERATIONS 973 ANSWERS
SEARCH TIME: 00.00.01

L9 973 SEA SSS FUL L8

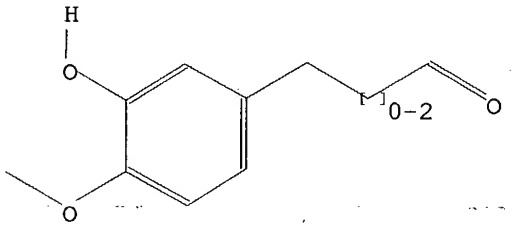
=> d scan

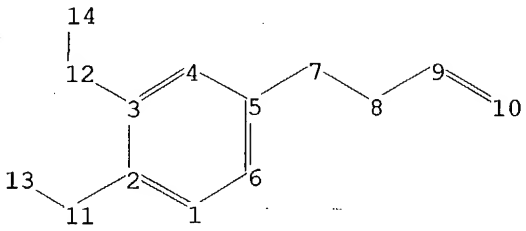
L9 973 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN INDEX NAME NOT YET ASSIGNED
MF C19 H22 O8 S
CI COM



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>
Uploading C:\Examination Auxillary files\10796093\10796093 clmd cmpd homologs Hfixed.str



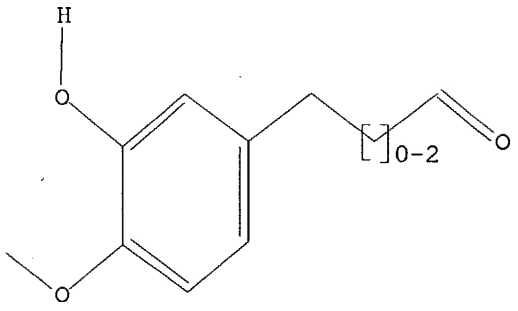


chain nodes :
7 8 9 10 11 12 13 14
ring nodes :
1 2 3 4 5 6
chain bonds :
2-11 3-12 5-7 7-8 8-9 9-10 11-13 12-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
2-11 3-12 9-10 11-13
exact bonds :
5-7 7-8 8-9 12-14
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Hydrogen count :
1:>= minimum 1 4:>= minimum 1 6:>= minimum 1 7:>= minimum 2 8:>= minimum 2
9:>= minimum 1 13:>= minimum 3
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS

L10 STRUCTURE UPLOADED

=> d l10
L10 HAS NO ANSWERS
L10 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l10 sss sam
SAMPLE SEARCH INITIATED 13:22:35 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 6196 TO ITERATE

16.1% PROCESSED 1000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 119202 TO 128638
PROJECTED ANSWERS: 0 TO 0

L11 0 SEA SSS SAM L10

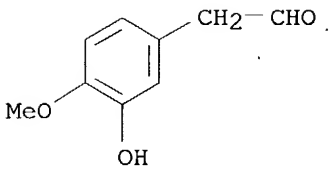
=> search l10 sss full
FULL SEARCH INITIATED 13:22:44 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 122173 TO ITERATE

100.0% PROCESSED 122173 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

L12 2 SEA SSS FUL L10

=> d scan

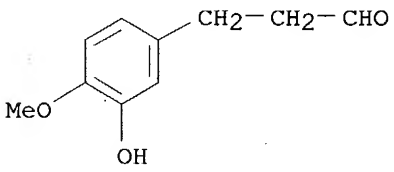
L12 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzeneacetaldehyde, 3-hydroxy-4-methoxy- (9CI)
MF C9 H10 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L12 2 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 3-hydroxy-4-methoxy- (9CI)
MF C10 H12 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	313.36	470.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-5.60

FILE 'CAPLUS' ENTERED AT 13:23:54 ON 05 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 5 Oct 2004 VOL 141 ISS 15
FILE LAST UPDATED: 4 Oct 2004 (20041004/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> l12
L13          11 L12

=> d his

     (FILE 'HOME' ENTERED AT 12:21:11 ON 05 OCT 2004)

     FILE 'REGISTRY' ENTERED AT 12:21:23 ON 05 OCT 2004
L1                STRUCTURE UPLOADED
L2              1 SEARCH L1 EXACT FULL

     FILE 'CAPLUS' ENTERED AT 12:26:39 ON 05 OCT 2004
L3              3 L2

     FILE 'REGISTRY' ENTERED AT 12:36:14 ON 05 OCT 2004
L4                STRUCTURE UPLOADED
L5              1 SEARCH L4 EXACT FULL

     FILE 'CAPLUS' ENTERED AT 12:37:10 ON 05 OCT 2004
L6             15 L5
L7              2 L5/PREP

     FILE 'REGISTRY' ENTERED AT 13:19:24 ON 05 OCT 2004
L8                STRUCTURE UPLOADED
L9            973 SEARCH L8 SSS FULL
L10               STRUCTURE UPLOADED
L11             0 SEARCH L10 SSS SAM
L12             2 SEARCH L10 SSS FULL

     FILE 'CAPLUS' ENTERED AT 13:23:54 ON 05 OCT 2004
L13            11 L12

=> l13 not l3
L14             8 L13 NOT L3

=> d l14 1-8 ti

L14  ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists

L14  ANSWER 2 OF 8  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists

L14  ANSWER 3 OF 8  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   The reaction of novocaine with the cobaltous halides

L14  ANSWER 4 OF 8  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   A new preparation of homoisovanillin

L14  ANSWER 5 OF 8  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Mechanism of the Mohlan-Bischler indole synthesis. I. The mechanistic fate
     of carbonyl oxygen in the rearrangement of 2-anilino-1-phenyl-1-propanone

L14  ANSWER 6 OF 8  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   New preparation of homoisovanillin

L14  ANSWER 7 OF 8  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   5-Phenyl-2-penten-4-yn-1-ol and related compounds
```

L14 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis of 3-hydroxy-4-methoxyphenylacetaldehyde (homoisovanillin) and 3,4-dihydroxyphenylacetaldehyde (homoprotocatechualdehyde)

=> d l14 1-8 ti fbib abs

L14 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists
AN 2002:409270 CAPLUS
DN 137:6173
TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists
IN Peng, Ge; Gallop, Mark A.; Chernov-Rogan, Tania; Yanofsky, Stephen D.; Pelletier, Jeffrey Claude; Green, Daniel Michael
PA USA
SO U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S. Ser. No. 633,025.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	US 2002065309	A1	20020530	US 2001-860810		20010518
				US 1999-147233P	P	19990804
				US 2000-633025	A2	20000804
	WO 2002011732	A1	20020214	WO 2001-US24506		20010803
	WO 2002011732	C1	20020620			
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
				US 2000-633025	A	20000804
				US 2001-860810	A	20010518
	AU 2001081067	A5	20020218	AU 2001-81067		20010803
				US 2000-633025	A	20000804
				US 2001-860810	A	20010518
				WO 2001-US24506	W	20010803

PATENT FAMILY INFORMATION:
FAN 2001:582116

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	WO 2001057288	A1	20010809	WO 2000-US21175		20000803
	W: JP, SG, UA					
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
				US 1999-147233P	P	19990804
				US 2000-621757	A	20000724
	EP 1198608	A1	20020424	EP 2000-952447		20000803
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY					
				US 1999-147233P	P	19990804
				US 2000-621757	A	20000724
				WO 2000-US21175	W	20000803
	JP 2003521584	T2	20030715	JP 2001-555910		20000803
				US 1999-147233P	P	19990804
				US 2000-621757	A	20000724
				WO 2000-US21175	W	20000803

FAN 2002:122794

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002011732	A1	20020214	WO 2001-US24506	20010803
	WO 2002011732	C1	20020620		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				US 2000-633025	A 20000804
				US 2001-860810	A 20010518
	US 2002065309	A1	20020530	US 2001-860810	20010518
				US 1999-147233P	P 19990804
				US 2000-633025	A2 20000804
	AU 2001081067	A5	20020218	AU 2001-81067	20010803
				US 2000-633025	A 20000804
				US 2001-860810	A 20010518
				WO 2001-US24506	W 20010803

OS MARPAT 137:6173
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [L1, L2 and L3 are independently linking groups; m, n, q are independently 0 or 1; Y = (H)a and Z = (OH)b, c is an optional single bond, wherein, when c = single bond, a and b are both 0, when c is absent, a and b are both 1; Q = O or S; X = N or CH; R1 and R2 are either (un)substituted hydrocarbyl (the same or different), or R1 and R2 are linked to form a 5- or 6-membered ring optionally containing 1-3 heteroatoms (selected from N, O and S); R3 = cyclic structure of 1-3 rings that may be fused or linked, wherein 1 or more of the rings maybe aromatic and/or heterocyclic; R4, R5, R6, R7 and R8 are independently selected from H, halo, OH, alkyl, alkenyl, alkoxy, etc., and further, when two of R4, R5, R6, R7 and R8 are ortho to each other, they may together form a 5- or 6-membered cyclic structure containing 0-2 heteroatoms; R9 and R10 = H, halo, OH, alkyl, alkenyl, alkynyl, alkoxy, amino, lower alkyl-substituted amino, nitro, nitrile and carboxyl], their preparation, methods of use and pharmaceutical compns. as antagonists of the GnRH receptor are disclosed. Thus, II was prepared in seven steps in 25% overall yield from resin bound α-BOC-β-FMOC-diaminopropionic acid with the bicyclic pyrrolidine core being formed by a zinc catalyzed intramol. cyclization. Evaluation of I for binding inhibition of human GnRH receptors provided IC50 values ranging from 35-1500 nM.

L14 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists
AN 2002:122794 CAPLUS
DN 136:167362
TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists
IN Peng, Ge; Gallop, Mark A.; Chernov-Rogan, Tania; Yanovsky, Stephen; Pelletier, Jeffrey Claude; Green, Daniel Michael
PA Glaxo Group Limited, UK
SO PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	WO 2002011732	A1	20020214	WO 2001-US24506		20010803
	WO 2002011732	C1	20020620			
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
				US 2000-633025	A	20000804
				US 2001-860810	A	20010518
	US 2002065309	A1	20020530	US 2001-860810		20010518
				US 1999-147233P	P	19990804
				US 2000-633025	A2	20000804
	AU 2001081067	A5	20020218	AU 2001-81067		20010803
				US 2000-633025	A	20000804
				US 2001-860810	A	20010518
				WO 2001-US24506	W	20010803

PATENT FAMILY INFORMATION:

FAN 2001:582116

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	WO 2001057288	A1	20010809	WO 2000-US21175		20000803
	W: JP, SG, UA					
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
				US 1999-147233P	P	19990804
				US 2000-621757	A	20000724
	EP 1198608	A1	20020424	EP 2000-952447		20000803
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY					
				US 1999-147233P	P	19990804
				US 2000-621757	A	20000724
				WO 2000-US21175	W	20000803
	JP 2003521584	T2	20030715	JP 2001-555910		20000803
				US 1999-147233P	P	19990804
				US 2000-621757	A	20000724
				WO 2000-US21175	W	20000803

FAN 2002:409270

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	US 2002065309	A1	20020530	US 2001-860810		20010518
				US 1999-147233P	P	19990804
				US 2000-633025	A2	20000804
	WO 2002011732	A1	20020214	WO 2001-US24506		20010803
	WO 2002011732	C1	20020620			
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
				US 2000-633025	A	20000804
				US 2001-860810	A	20010518
	AU 2001081067	A5	20020218	AU 2001-81067		20010803

US 2000-633025 A 20000804
US 2001-860810 A 20010518
WO 2001-US24506 W 20010803

OS MARPAT 136:167362
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [L1, L2 and L3 are independently linking groups; m, n, q are independently 0 or 1; Y = (H)a and Z = (OH)b, c is an optional single bond, wherein, when c = single bond, a and b are both 0, when c is absent, a and b are both 1; Q = O or S; X = N or CH; R1 and R2 are either (un)substituted hydrocarbyl (the same or different), or R1 and R2 are linked to form a 5- or 6-membered ring optionally containing 1-3 heteroatoms (selected from N, O and S); R3 = cyclic structure of 1-3 rings that may be fused or linked, wherein 1 or more of the rings maybe aromatic and/or heterocyclic; R4, R5, R6, R7 and R8 are independently selected from H, halo, OH, alkyl, alkenyl, alkoxy, etc., and further, when two of R4, R5, R6, R7 and R8 are ortho to each other, they may together form a 5- or 6-membered cyclic structure containing 0-2 heteroatoms; R9 and R10 = H, halo, OH, alkyl, alkenyl, alkynyl, alkoxy, amino, lower alkyl-substituted amino, nitro, nitrile and carboxyl], their preparation, methods of use and pharmaceutical compns. as antagonists of the GnRH receptor are disclosed. Thus, II was prepared in seven steps in 25% overall yield from resin bound α-BOC-β-FMOC-diaminopropionic acid with the bicyclic pyrrolidine core being formed by a zinc catalyzed intramol. cyclization. Evaluation of I for binding inhibition of human GnRH receptors provided IC50 values ranging from 35-1500 nM.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI The reaction of novocaine with the cobaltous halides
AN 1959:62416 CAPLUS
DN 53:62416
OREF 53:11289e-g
TI The reaction of novocaine with the cobaltous halides
AU Khakimov, Kh. Kh.; Azizov, M. A.
CS Pharm. Inst., Tashkent
SO Doklady Akademii Nauk UzSSR (1958), (No. 10), 31-4
CODEN: DANUAO; ISSN: 0134-4307
DT Journal
LA Unavailable
AB The halide salts of novocaine (C13H20O2N2) (I) form 2 series of salts with CoX2. Compds. of the 1st series were prepared by dropwise addition of 1 part saturated aqueous CoX2 to 3 parts saturated aqueous solution of I.HX. The precipitate was washed with alc. then ether: CoCl2.2I.2HCl, bright blue, m. 184°, conductivity 425, solubility 50 g./100 g. H2O; CoBr2.2I.2HBr, greenish blue, m. 149°, conductivity 398, solubility 45 g./100 g. H2O. Compds. of the 2nd series were prepared by mixing equivalent amts. of CoX2 and I, both dissolved in concentrated solns. of the corresponding acid. CoCl2.I.2HCl, bright blue, m. 223°, conductivity 771, solubility 47 g./100 g. H2O; CoBr2.I.2HBr, greenish blue, m. 212°, conductivity 611, solubility 190 g./100 g. H2O; CoI2.I.2HI.2H2O, green, m. 125, conductivity 743, solubility 300 g./100 g. H2O. In aqueous and alc. solution the free base did not form complex salts.

L14 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI A new preparation of homoisovanillin
AN 1959:62415 CAPLUS
DN 53:62415
OREF 53:11289e
TI A new preparation of homoisovanillin
AU Hermanek, S.; Stanek, J.
SO Collection of Czechoslovak Chemical Communications (1959), 24, 1366-8
CODEN: CCCCAK; ISSN: 0010-0765
DT Journal
LA Unavailable
AB See C.A. 52, 10941c.

L14 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI Mechanism of the Mohlan-Bischler indole synthesis. I. The mechanistic fate of carbonyl oxygen in the rearrangement of 2-anilino-1-phenyl-1-propanone
AN 1959:62414 CAPLUS
DN 53:62414
OREF 53:11289b-e
TI Mechanism of the Mohlan-Bischler indole synthesis. I. The mechanistic fate of carbonyl oxygen in the rearrangement of 2-anilino-1-phenyl-1-propanone
AU Nelson, K. LeRoi; Seefeld, Ralph L.
CS Wayne State Univ., Detroit, MI
SO Journal of the American Chemical Society (1958), 80, 5957-9
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA Unavailable
OS CASREACT 53:62414
AB The mechanism of rearrangement of PhNHCHMeBz (I) to AcCHPhNHPh (II) in the presence of PhNH3Br (III) or pyridine-HBr (IV) was investigated with use of O18 as tracer. I (0.01 mole) and 0.01 mole III in 25 ml. 95% EtOH (made up with H2O containing 1.4 atom-% O18) refluxed 8.5 hrs. under N gave 0.55 g. I and 1.09 g. II containing 0.68 and 0.36 atom-% excess O18, resp. I and IV refluxed similarly 20 hrs. gave 1.13 g. I and 0.38 g. III containing 0.84 and 0.16 atom-% excess O18. II and III refluxed 4 hrs. gave 0.14 g. I, whereas II and IV gave no I after 12 hrs. I refluxed with p-ClC6H4NH3Br, m. 243-5°, showed amine exchange and gave p-ClC6H4NHCHPhAc, m. 129-31°. The results showed that there is exchange of O between carbonyl and solvent, exclusive of any rearrangement, and that there is no important O exchange directly associated with rearrangement of I to II or II to I. The reaction must involve intramol. migration of the carbonyl O and cannot proceed by the mechanism proposed by Cowper and Stevens (C.A. 42, 147c). A new mechanism is proposed involving addition of catalyst to the carbonyl C and formation of an intermediate epoxy structure.

L14 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI New preparation of homoisovanillin
AN 1958:61002 CAPLUS
DN 52:61002
OREF 52:10941c-e
TI New preparation of homoisovanillin
AU Hermanek, Stanislav; Stanek, Jan
CS Tech. Univ., Prague
SO Chemicke Listy pro Vedu a Prumysl (1958), 52, 355-6
CODEN: CLPRAN; ISSN: 0366-6832
DT Journal
LA Unavailable
OS CASREACT 52:61002
AB Ozonization of the benzyl ether of chavibetol (I), subsequent hydrogenation of the ozonide, and hydrogenolysis of the resulting benzyl ether (II) of homoisovanillin (III) gave III in 49% over-all yield.

Similarly was prepared homoveratric aldehyde (IV). Passing 6 hrs. a stream of dry O containing 3% O3 at 100 ml./min. through 15 g. I in 200 ml. AcOEt cooled with dry CO2 in Me2CO, adding 3 g. 5% Pd/Al2O3, hydrogenating 3 hrs., and evaporating the solvent gave crude II. This dissolved in 450 ml. MeOH and hydrogenated over 3 g. catalyst gave after 4 hrs. 5.1 g. III, b0.2 117-22°; semicarbazone, m. 182°. Similar treatment of 10 g. eugenol Me ether gave 5.1 g. IV, b0.3 118-23°; semicarbazone, m. 162-3°. IV (7.2 g.) kept 2 days with 32 g. 2% HCl-absolute MeOH, the mixture boiled 15 min., diluted with 5 vols. H2O, extracted with Et2O, the extract shaken 15 min. with 2 g. NH2OH.HCl and 1.6 g. KOH in 15 ml. ice water, the solvent evaporated, and the oil distilled gave 4.5 g. di-Me acetal of IV, b0.3 112-16°. Attempts at demethylation of the di-Me acetal (4.5 g.) by treatment with Na in liquid NH3 failed, yielding 3.5 g. recovered starting compound and 0.9 g. mixture containing guaiacol.

L14 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI 5-Phenyl-2-penten-4-yn-1-ol and related compounds
AN 1958:61001 CAPLUS
DN 52:61001
OREF 52:10940h-i,10941a-c
TI 5-Phenyl-2-penten-4-yn-1-ol and related compounds
AU Jacobs, Thomas L.; Dankner, David; Dankner, Arlyn R.
CS Univ. of California, Los Angeles
SO Journal of the American Chemical Society (1958), 80, 864-6
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA Unavailable
OS CASREACT 52:61001
AB Epichlorohydrin (102 g.) added dropwise during about 0.5 h. to 2 mol PhC.tplbond.CNa in 2.3 l. liquid NH3, refluxed 7 h. with stirring, treated with 118 g. NH4Cl in 3 portions and then with 1 l. Et2O, the NH3 evaporated overnight with stirring, the residual Et2O solution filtered, the residue washed with Et2O and dissolved in H2O, the aqueous solution extracted with Et2O, and the combined Et2O solns. worked up gave about 0.8 mol PhC.tplbond.CH, 55.2 g. α-benzylfuran, b0.001 50-2°, n25D 1.5411, and 58.6 g. PhC.tplbond.CCH:CHCH2OH (I), b0.001 92-7°, n25D 1.6158. CrO3 (15.8 g.) and 25.3 g. concentrated H2SO4 diluted with H2O to 79 cc., the solution added dropwise with stirring to 17.9 g. I in 70 cc. Me2CO during 1 h. at about 15°, the mixture stirred 1 h. at 15°, poured onto crushed ice, and extracted with Et2O, and the extract extracted with aqueous NaHCO3, dried, and worked up gave 9.7 g. PhC.tplbond.CCH:CHCHO(II), b0.001 62°, n25D 1.6422; the aqueous NaHCO3 extract gave 0.4 g. PhC:CCO2H, m. 130-3°. II (12.1 g.) in EtOH added to Ag2O (from 72.7 g. AgNO3 and 12.4 g. NaOH) in 400 cc. H2O and shaken 22 h., the Ag salt treated with aqueous NaOH, and the resulting Na salt treated with dilute H2SO4 yielded PhC.tplbond.CCH:CHCO2H (III), m. 147-8.6° (pentane). III (0.3 g.) in 4.46 g. glacial AcOH and 4.46 g. concentrated H2SO4 warmed 5 h. on the steam bath, kept at room temperature overnight, diluted with H2O, and cooled, and the solid product dissolved in Et2O, washed with H2O, dried, and evaporated gave 0.28 g. phenylcoumalin (IV), m. 66-7° (pentane). PhC.tplbond.CCH:C(CO2H)2, m. 200-18°, refluxed 18 h. in p-xylene yielded the 3-CO2H derivative of IV, m. 218°.

L14 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis of 3-hydroxy-4-methoxyphenylacetaldehyde (homoisovanillin) and 3,4-dihydroxyphenylacetaldehyde (homoprotocatechualdehyde)
AN 1941:568 CAPLUS
DN 35:568
OREF 35:94e-i,95a-h

TI Synthesis of 3-hydroxy-4-methoxyphenylacetaldehyde (homoisovanillin) and 3,4-dihydroxyphenylacetaldehyde (homoprotocatechualdehyde)

AU Schopf, Clemens; Brass, Eva; Jacobi, Ernst; Jorde, Walter; Mocnik, Walter; Neuroth, Ludwig; Salzer, Walter

SO Ann. (1940), 544, 30-62
DT Journal
LA Unavailable

AB The following aldehydes have been synthesized because of their importance as building units in the biogenesis of plant substances, especially the alkaloids, and for a study of their condensation with such compds. as 3,4-(HO)2C6H3CH2CH2NH2 under physiol. conditions. Details are given of the preparation of chavibetol, 3,4-HO(MeO)C6H3CH2CH:CH2 (I), from eugenol (II) Me ether by the use of MeMgI in xylene at 160-80° (2 h.); unchanged II can be removed in part by cooling a solution of 42 g. of the mixture in 120 cc. absolute EtOH containing 19 g. KOH, whereby the K salt of II seps.; the alc. filtrate gives 15.5 g. of crude I which can be further purified through the Bz derivative, m. 49.5°. The crude I may be treated with PhCH2Cl and K2CO3 in MeOH (boiling 20 h.) and the benzyl ether (III) of I, m. 48°, crystallized from MeOH; the yield of pure III from pure I is 82%; 30 g. crude I yields 33 g. pure III. III (5.1 g.) in 60 cc. C6H6, heated 20 h. with a mixture of 10.1 g. BzOAg and 5.7 g. I in 35 cc. C6H6 (previously shaken for 15 min. and then warmed on the water bath for 5 min.), the AgI filtered off, the C6H6 removed by evaporation, the residue dissolved in 100 cc. MeOH, saponified with 3.2 g. Na in 32 cc. MeOH, the mixture extracted with CHCl3 and crystallized from AcOEt, gives 4.2 g. of benzylchavibetol glycol (IV), b0.04 215-20°, m. 110°. IV was also prepared by the following method. 3,4-PhCH2O(MeO)C6H3CH2CO2H with SOCl2 (must be purified over beeswax to give a crystalline product) (boiling in C6H6 for 8 h.) or with PCl5 (in C6H6, 0.5 h. at 0°) gives the acid chloride which, without purification, reacts with CH2N2 in ether to give 81% of the diazo ketone, C17H16O3N2, yellow, m. 86°; addition of 10 g. to 20 cc. AcOH at 60-70° yields 77% of the acetoxy ketone, C19H20O5, m. 106°, which is reduced by (iso-PrO)3Al in iso-PrOH to IV (94% yield). Shaking IV in MeOH with PdCl2-BaSO4 in a H atmospheric gives chavibetol glycol, m. 86°. Details are given of the preparation of 3,4-PhCH2O(MeO)C6H3CH2COCO2H (V) (cf. Robinson and Sugasawa, C. A. 26, 1289); Me ester, m. 148-50°. Catalytic reduction of V yields α-hydroxy-β-(3-hydroxy-4-methoxyphenyl)propionic acid, (VI), m. 170° (Me ester, m. 62°); Pb(OAc)4 splits off 55% of the calculated amount of CO2 but the aldehyde could not be isolated. Reduction of 8 g. of V in 50% hot AcOH with Zn (boiling 1 h.) gives 5.2 g. of the 3-benzyl ether of VI, m. 129-30°; CH2N2 gives the Me ester (VII), m. 87°. VII (6.3 g.) and MeMgI give 5.9 g. of the glycol (VIII), 3,4-PhCH2O(MeO)C6H3CH2CH(OH)CMe2OH, m. 86°. VIII with Pb(OAc)4 in C6H6 gives a nearly quant. yield of 3-benzyloxy-4-methoxyphenylacetaldehyde (IX), b0.01 155° (bath temperature); semicarbazone, m. 143-4°; 2,4-dinitrophenylhydrazone, m. 151-2°. IV with Pb(OAc)4 in hot C6H6 gives 90% of IX. With Pd in MeOH IX gives 3-hydroxy-4-methoxyphenylacetaldehyde (X), b0.05 110-15° (bath temperature); 0.53 g. is soluble in 50 cc. H2O; semicarbazone, m. 182-3°. X is stable for 24 h. at room temperature in an acetate buffer solution at pH 3 and 4; only slight decomposition occurs at pH 5 and 6 but considerable decomposition occurs at pH 7; at pH 8 X is completely decomposed in 24 h. This stability compares with that of 3,4-CH2O2C6H3CH2CHO. 3,4-(HO)2C6H3CH2CH:CH2 (XI) (prepared in a poor yield from o-C6H4(OH)2 and in 33% yield from eugenol Me ether with MeMgI) (28 g.) in 140 cc. Me2CO and 130 g. K2CO3, treated dropwise with 87 cc. PhCH2Cl and heated 20-2 h. on the water bath, gives, after purification of the C6H6 solution by adsorption on

Al2O3, 75% of 3,5-dibenzyloxyallylbenzene (XI), m. 37-8°. Treatment of 6.6 g. XI with BzOAg and I in C6H6 as above, gives 75% of 1,2-dihydroxy-3-(3',4'-dibenzyloxyphenyl)propane, m. 82-3°; Pb(OAc)4 in hot AcOH gives after 20 min. of reaction time 3,4-dibenzyloxyphenylacetaldehyde, an oil, whose semicarbazone m. 158°; catalytic reduction with an active Pd in MeOH gives 3,4-dihydroxyphenylacetaldehyde (XII), which could not be distilled; semicarbazone, m. 200-1°; 2,4-dinitrophenylhydrazone, m. 169-70°. XII is stable for 12 h. at 25° at pH 3 and 4 but rapidly decomps. at pH 7 and 8, giving a red solution, probably the o-quinone. 3,4-Methylenedioxyphenylpyruvic acid (XIII) gives a Me ester, m. 130-1°. Catalytic reduction of XIII with PtO2 in dilute aqueous Na2CO3 gives α-hydroxy-β-(3,4-methylenedioxyphenyl)propionic acid (XIV), m. 101°; Pb(OAc)4 in C6H6 or AcOH gives 34 or 31% of homopiperonal (XV). The Me ester of XIV, m. 39°, with MeMgI yields 2-methyl-2,3-dihydroxy-4-(3',4'-methylenedioxyphenyl)butane, m. 106°; with Pb (OAc)4 this gives Me2CO and a good yield of XV. 2,3-Ac2C6H3CH2CH:CH2 (m. 65°) (1 g.) with N BzO2H in CHCl3 (5 days) gives 2 g. of the oxide [1,2-oxido-3-(2',3'-diacetoxyphenyl)propane], b0.05 160° (bath temperature), m. 86°; the corresponding oxide of 3,4-Ac2C6H3CH2CH:CH2 could not be distilled or crystallized Acetyleugenol (20.6 g.) gives 12.5 g. of the oxide [1,2-oxido-3-(3'-methoxy-4'-acetoxyphenyl)propane], b0.05 133°, m. 50-2°; refluxing with 10% AcOH gives acetyleugenol glycol, b0.03 168°. The dibenzyl ether (m. 92-3°, 73% yield) with hippuric acid, Ac2O and AcONa, heated 2 h. on the water bath, gives 60% of 2-phenyl-4-(3',4'-dibenzyloxybenzylidene)oxazolone, yellow, m. 156-7°; it could not be hydrolyzed by 10% NaOH or KOH. Isoferulic acid (XVI) and Br in AcOH give 3-hydroxy-4-methoxy-ω-bromostyrene (XVII), m. 95-6°; the Ac derivative of XVI with Br in CHCl3 gives the Ac derivative of XVII, m. 101-2°. 3,4-Dimethoxy-ω-bromostyrene, heated with EtONa for 2 h. at 180-5°, gives 3,4-dimethoxyphenylacetylene, b15 130°, m. 73-4. α-(3,4-Diacetoxyphenyl)-β-acetoxyethanone, on reduction with Zn in AcOH at 70°, gives 3,4-Ac2C6H3Ac, m. 86°. The compds. of Voswinkel (C. A. 4, 769), 3,4-Ac2C6H3CH2CH2OH and 3,4-Ac2C6H3CH2CHO, do not exist.

=> l13/prep
FIELD CODES CANNOT BE CHANGED HERE
You may have tried to apply a field code to a term that already has a field code. You can only add a field code to a term that has no field code appended to it.

=> l12/prep
```
            11 L12
       3205030 PREP/RL
L15           4 L12/PREP
                  (L12 (L) PREP/RL)
```

=> d l15 1-4 ti ti

L15 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists
TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists

L15 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists
TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists

L15 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for producing cinnamyl aldehyde derivatives and use thereof as

```
     intermediate for aspartame derivative
TI   Process for producing cinnamyl aldehyde derivatives and use thereof as
     intermediate for aspartame derivative

L15  ANSWER 4 OF 4  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Process for the production of aspartyldipeptide ester derivatives, novel
     intermediates therefor and process for the production of the intermediates
TI   Process for the production of aspartyldipeptide ester derivatives, novel
     intermediates therefor and process for the production of the intermediates


=> save temp l15 aspcmpds/a
ANSWER SET L15 HAS BEEN SAVED AS 'ASPCMPDS/A'

=>

---Logging off of STN---


Connection closed by remote host
END

 Unable to generate the STN prompt.
 Exiting the script...

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2          "Ask CAS" for self-help around the clock
 NEWS  3  Jul 12  BEILSTEIN enhanced with new display and select options,
                  resulting in a closer connection to BABS
 NEWS  4  AUG 02  IFIPAT/IFIUDB/IFICDB reloaded with new search and display
                  fields
 NEWS  5  AUG 02  CAplus and CA patent records enhanced with European and Japan
                  Patent Office Classifications
 NEWS  6  AUG 02  The Analysis Edition of STN Express with Discover!
                  (Version 7.01 for Windows) now available
 NEWS  7  AUG 27  BIOCOMMERCE: Changes and enhancements to content coverage
 NEWS  8  AUG 27  BIOTECHABS/BIOTECHDS: Two new display fields added for legal
                  status data from INPADOC
 NEWS  9  SEP 01  INPADOC: New family current-awareness alert (SDI) available
 NEWS 10  SEP 01  New pricing for the Save Answers for SciFinder Wizard within
                  STN Express with Discover!
 NEWS 11  SEP 01  New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
 NEWS 12  SEP 14  STN Patent Forum to be held October 13, 2004, in Iselin, NJ
 NEWS 13  SEP 27  STANDARDS will no longer be available on STN
 NEWS 14  SEP 27  SWETSCAN will no longer be available on STN

 NEWS EXPRESS  JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT
```

MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 08:22:00 ON 06 OCT 2004

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:22:16 ON 06 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 OCT 2004 HIGHEST RN 756793-93-8
DICTIONARY FILE UPDATES: 4 OCT 2004 HIGHEST RN 756793-93-8

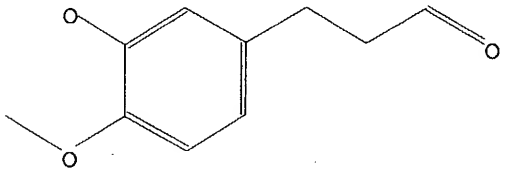
TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

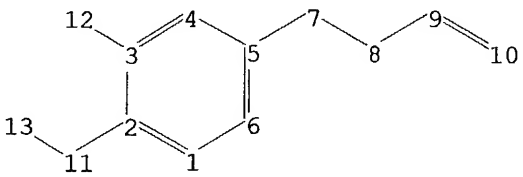
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Examination Auxillary files\10796093\10796093 clmd cmpd protected H fixed.str





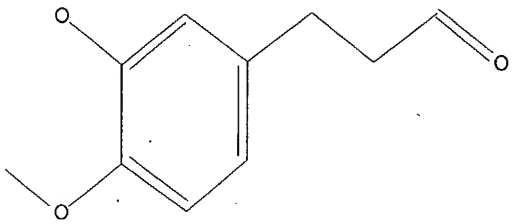
chain nodes :
7 8 9 10 11 12 13
ring nodes :

1 2 3 4 5 6
chain bonds :
2-11 3-12 5-7 7-8 8-9 9-10 11-13
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
2-11 3-12 9-10 11-13
exact bonds :
5-7 7-8 8-9
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Hydrogen count :
1:>= minimum 1 4:>= minimum 1 6:>= minimum 1 7:>= minimum 2 8:>= minimum 2
9:>= minimum 1 13:>= minimum 3
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> search l1 sss sam
SAMPLE SEARCH INITIATED 08:22:44 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 4124 TO ITERATE

24.2% PROCESSED 1000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 78630 TO 86330
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

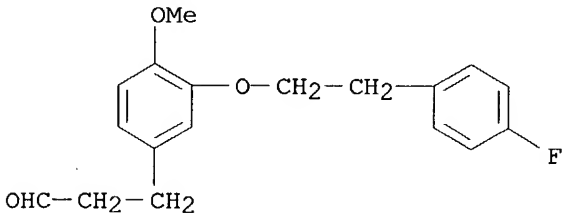
=> search l1 sss full
FULL SEARCH INITIATED 08:22:53 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 81536 TO ITERATE

100.0% PROCESSED 81536 ITERATIONS 8 ANSWERS
SEARCH TIME: 00.00.02

L3 8 SEA SSS FUL L1

=> d scan

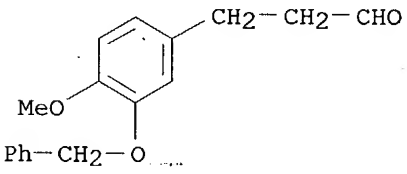
L3 8 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 3-[2-(4-fluorophenyl)ethoxy]-4-methoxy- (9CI)
MF C18 H19 F O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

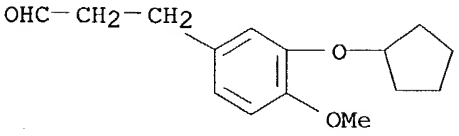
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):8

L3 8 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 4-methoxy-3-(phenylmethoxy)- (9CI)
MF C17 H18 O3



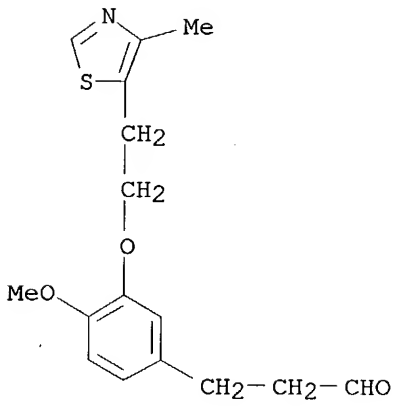
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 8 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 3-(cyclopentyloxy)-4-methoxy- (9CI)
MF C15 H20 O3



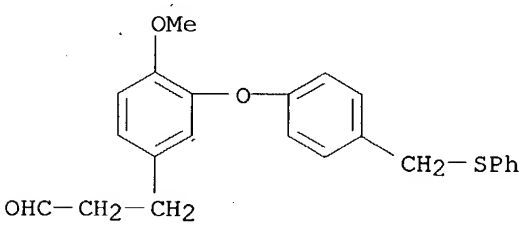
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 8 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 4-methoxy-3-[2-(4-methyl-5-thiazolyl)ethoxy]- (9CI)
MF C16 H19 N O3 S



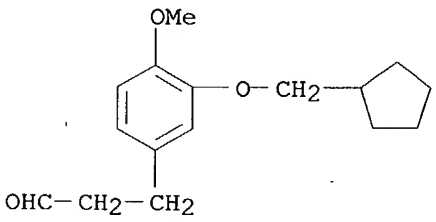
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 8 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 4-methoxy-3-[4-[(phenylthio)methyl]phenoxy]- (9CI)
MF C23 H22 O3 S



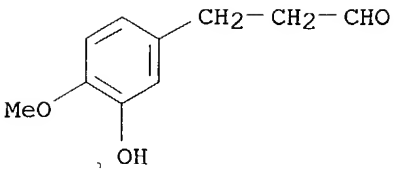
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 8 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 3-(cyclopentylmethoxy)-4-methoxy- (9CI)
MF C16 H22 O3



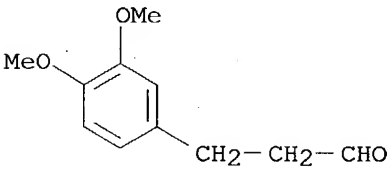
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 8 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 3-hydroxy-4-methoxy- (9CI)
MF C10 H12 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 8 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Benzenepropanal, 3,4-dimethoxy- (9CI)
MF C11 H14 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	156.68	156.89

FILE 'CAPLUS' ENTERED AT 08:24:42 ON 06 OCT 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 6 Oct 2004 VOL 141 ISS 15
FILE LAST UPDATED: 4 Oct 2004 (20041004/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> l3
L4 27 L3

=> d 17-27 ti

L4 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI A practical iodination of aromatic compounds using tetrabutylammonium peroxydisulfate and iodine

L4 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Utilization of the Intramolecular Cycloaddition-Cationic π-Cyclization of an Isomuenchnone Derivative for the Synthesis of (±)-Lycopodine

L4 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of optically active 2-cyclopentenone derivatives as anticancer agents for promotion of bone formation

L4 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of β-lactone derivatives as anticholesteremics

L4 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of trisubstituted benzene compounds for treating congestive heart failure

L4 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI 1,3-Benzodithiolium cation mediated cyclization reactions

L4 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthetic routes to the piperolides, fadyenolides, epoxypiperolides, and related compounds

L4 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Search for new calcium antagonists. Lipophilic oximes and phosphonates

L4 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Syntheses of the (±)-[n]-gingerols (pungent principles of ginger) and related compounds through regioselective aldol condensations: relative pungency assays

L4 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI 2,3-Dihydropyrans

L4 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis of (±)-[6]-gingerol (pungent principle of ginger) and relatives via directed aldol reactions

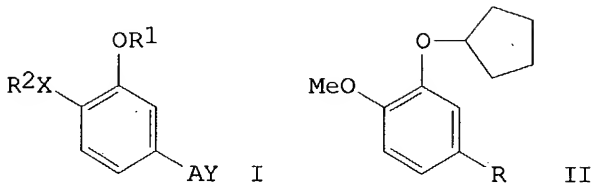
=> d 14 21 ti fbib abs

L4 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of trisubstituted benzene compounds for treating congestive heart failure
AN 1991:185027 CAPLUS
DN 114:185027
TI Preparation of trisubstituted benzene compounds for treating congestive heart failure
IN Hawkins, Lynn D.
PA Warner-Lambert Co., USA
SO U.S., 15 pp. Cont. of U.S. Ser. No. 38,252, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	US 4971959	A	19901120	US 1988-292580	19881230
				US 1987-38252	19870414
	US 5274002	A	19931228	US 1990-578965	19900906
				US 1987-38252	19870414
				US 1988-292580	19881230

OS MARPAT 114:185027
GI



AB The title compds. [I; R1 = C3-6 cycloalkyl; R2 = alkyl; X = O, S; A = bond, C1-7 alkylene, C2-6 alkenylene optionally interrupted by O, S, and imino; Y = CONR3R4 wherein R3, R4 = H, alkyl, azido, cyano] are prepared Hydrogenation of II [R = (E)-CH:CHCO2Me] (preparation given) over 5% Pd-C gave 83.9% propionate II (R = CH2CH2CO2Me), which was heated in anhydrous methanolic NH3 at 100° to give 32.0% I (R1 = cyclopentyl, R2X = MeO, A = CH2CH2, Y = CONH2) (III). III showed EC50 of 1 + 10-5M in improving coronary blood flow and increased heart contractility at 1.0 mg/kg in dogs.

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.72	164.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.70	-0.70

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:27:06 ON 06 OCT 2004

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
* * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 08:39:08 ON 06 OCT 2004
FILE 'CAPLUS' ENTERED AT 08:39:08 ON 06 OCT 2004
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.72	164.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION

CA SUBSCRIBER PRICE -0.70 -0.70

=> d his

(FILE 'HOME' ENTERED AT 08:22:00 ON 06 OCT 2004)

FILE 'REGISTRY' ENTERED AT 08:22:16 ON 06 OCT 2004
L1 STRUCTURE UPLOADED
L2 0 SEARCH L1 SSS SAM
L3 8 SEARCH L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 08:24:42 ON 06 OCT 2004
L4 27 L3

=> d l4 1-17 ti

L4 ANSWER 1 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Fresh organically grown ginger (Zingiber officinale): composition and effects on LPS-induced PGE2 production

L4 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of arylquinazolines and related derivatives for promoting the release of parathyroid hormone

L4 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Use of a secondary or tertiary phenylated amines to smooth wrinkles

L4 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis of polysubstituted furans by 2palladium-catalyzed coupling of butatrienyl carbinols with aryl halides and triflates

L4 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis of N,N',N''-trisubstituted thiourea derivatives and their antagonist effect on the vanilloid receptor

L4 ANSWER 6 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis and anticancer activity of nordihydroguaiaretic acid (NDGA) and analogues

L4 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for producing cinnamyl aldehyde derivatives and use thereof as intermediate for aspartame derivative

L4 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI N-Alkylaspartyl dipeptide esters and low-calorie sweeteners containing them

L4 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI High hypolipidemic activity of saturated side-chain α-asarone analogs

L4 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of β-alanine derivatives as fibrinogen receptor antagonists

L4 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Structural effects on the OH--promoted fragmentation of methoxy-substituted 1-arylalkanol radical cations in aqueous solution: the role of oxygen acidity

L4 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for the production of aspartyldipeptide ester derivatives, novel intermediates therefor and process for the production of the intermediates

L4 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI A Novel Straightforward Synthesis of Enantiopure Tetrahydroisoquinoline Alkaloids

L4 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI The Synthesis and Evaluation of a Solution Phase Indexed Combinatorial Library of Non-Natural Polyenes for Reversal of P-Glycoprotein Mediated Multidrug Resistance

L4 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Potent and Selective Non-Peptidic Inhibitors of Endothelin-Converting Enzyme-1 with Sustained Duration of Action

L4 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of 1,4-dihydropyridine derivatives as antagonists against tolerance to anticancer drugs or potentiators for anticancer drugs

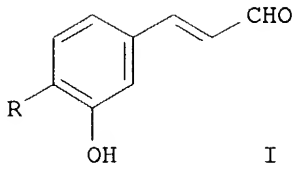
L4 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI A practical iodination of aromatic compounds using tetrabutylammonium peroxydisulfate and iodine

=> d l4 7 ti fbib abs

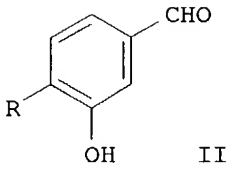
L4 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI Process for producing cinnamyl aldehyde derivatives and use thereof as intermediate for aspartame derivative
AN 2001:851092 CAPLUS
DN 135:371997
TI Process for producing cinnamyl aldehyde derivatives and use thereof as intermediate for aspartame derivative
IN Mori, Kenichi; Fujita, Shinji; Funakoshi, Nao; Takemoto, Tadashi
PA Ajinomoto Co., Inc., Japan
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001087813	A1	20011122	WO 2001-JP3545	20010424
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				JP 2000-142811	A 20000516
	EP 1283197	A1	20030212	EP 2001-922073	20010424
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
				JP 2000-142811	A 20000516
				WO 2001-JP3545	W 20010424
	US 2003163004	A1	20030828	US 2002-295997	20021118
				JP 2000-142811	A 20000516
				WO 2001-JP3545	A1 20010424

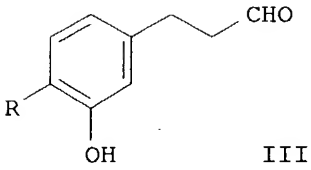
OS CASREACT 135:371997; MARPAT 135:371997
GI



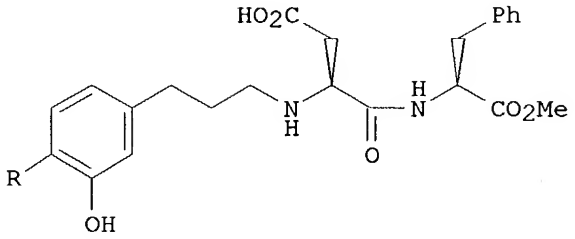
I



II



III



IV

AB Described is an industrial process for conveniently and efficiently producing highly pure cinnamyl aldehyde derivs. (I; R = H, C1-4 alkyl or alkoxy) such as (2E)-(3-hydroxy-4-methoxy)cinnamyl aldehyde which comprises reacting a benzaldehyde derivative (II; R = same as above) (for example, isovanillin) with acetaldehyde in the presence of an alkali, preferably adding acetaldehyde in portions in an aqueous solution at a low temperature

The cinnamyl aldehyde derivs. (I) thus obtained are selectively reduced into 3-(3-hydroxy-4-substituted phenyl)propionaldehydes (III; R = same as above). These compds. III are further subjected to reductive alkylation with aspartame to efficiently give N-[N-[3-(3-hydroxy-4-substituted phenyl)propyl]-L-α-aspartyl]-L-phenylalanine 1-Me esters (IV; R = H, C1-4 alkyl or alkoxy), which are useful as sweeteners with high sweetness. Thus, 121.72 g isovanillin and 320 g NaOH were dissolved in 2,000 mL H2O and cooled to -10°, followed by continuously adding 290 g 28 weight% aqueous acetaldehyde over a period of 45 h, and the resulting mixture was stirred for 1 h, treated with 768.1 g 36 weight% aqueous HCl, and filtered to give 324 g crystalline product. The latter product was dispersed in 500 mL H2O at 25°, treated with 97.5 g 25 weight% aqueous NaOH for dissoln., stirred with 4 g activated charcoal and 16 g celite, and filtered. The filtrate was neutralized with 55.4 g 36 weight% aqueous HCl to give 185.5 g crystalline product

which was vacuum-dried, dispersed in 275 mL MeOH at 60°, stirred for 2 h, cooled to room temperature, and filtered to give, after drying the wet crystals, 83.2 g (2E)-3-hydroxy-4-methoxycinnamaldehyde (98% purity) in 57% yield. The latter compound (5.00 g) and 300 mg 5% Pd-Al2O3 were added to 80 mL MeOH and stirred under H atmospheric at 35° for 24 h, followed by filtration for removal of the catalyst and washing the catalyst with 10 mL MeOH, to give a MeOH solution of 3-(3-hydroxy-4-methoxyphenyl)propionaldehyde (87% yield). The latter solution (8.15 g) containing 1.50 g of the aldehyde and

2.57 g aspartame were added to a 4:1 mixture of MeOH and H2O, followed by adding 0.7 g 10% Pd-C containing 50% H2O, and the resulting mixture was stirred at 35° under H atmospheric for 48 h to give 71% N-[N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L-α-aspartyl]-L-phenylalanine 1-Me ester.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d l4 9 ti fbib abs

L4 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
TI High hypolipidemic activity of saturated side-chain α-asarone analogs
AN 2001:830461 CAPLUS
DN 136:128585
TI High hypolipidemic activity of saturated side-chain α-asarone analogs
AU Cruz, Adriana; Garduno, Leticia; Salazar, Maria; Martinez, Elizdath; Diaz, Francisco; Chamorro, German; Tamariz, Joaquin
CS Departamento de Quimica Organica, Escuela Nacional de Ciencias Biologicas, IPN. Prol. Carpio y Plan de Ayala, Mexico, 11340, Mex.
SO Medicinal Chemistry Research (2001), 10(9), 587-595
CODEN: MCREEB; ISSN: 1054-2523
PB Birkhaeuser Boston
DT Journal
LA English
AB With the aim of evaluating the pharmacophore potential of the side chain of α-asarone regarding its high hypolipidemic activity, α-asarone analogs (I) were evaluated pharmacol. For I, with a variable-size side chain, significant decreases in serum cholesterol, LDL-cholesterol, and triglyceride levels and significant increases in HDL-cholesterol levels were observed in mice. I were even more active than α-asarone in reducing cholesterol. The results suggested that the length and saturated character of the side chain seem to be a key feature in improving hypolipidemic activity of I.
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	21.17	178.06

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.10	-2.10

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:43:20 ON 06 OCT 2004